

Biological Weapons Response Template and Decision Tree

Dr. Mohamed Mughal



*Homeland Defense Business Unit
U.S. Army Soldier and Biological Chemical Command
Department of Defense*

*Telephone: 410-436-4921
Email: mohamed.mughal@sbccom.apgea.army.mil*

Report Documentation Page

Report Date 30Apr2001	Report Type N/A	Dates Covered (from... to) -
Title and Subtitle Biological Weapons Response Template and Decision Tree		Contract Number
		Grant Number
		Program Element Number
Author(s) Mughal, Mohamed		Project Number
		Task Number
		Work Unit Number
Performing Organization Name(s) and Address(es) U.S. Army Soldier and Biological Chemical Command Department of Defense		Performing Organization Report Number
Sponsoring/Monitoring Agency Name(s) and Address(es) NDIA (National Defense Industrial Association) 211 Wilson Blvd, STE. 400 Arlington, VA 22201-3061		Sponsor/Monitor's Acronym(s)
		Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited		
Supplementary Notes Proceedings from the Weapons of Mass Destruction (WMD) Terrorism Preparedness & Response Conference & Exhibition, 30 April - 2 May 2001 Sponsored by NDIA		
Abstract		
Subject Terms		
Report Classification unclassified	Classification of this page unclassified	
Classification of Abstract unclassified	Limitation of Abstract UU	
Number of Pages 25		



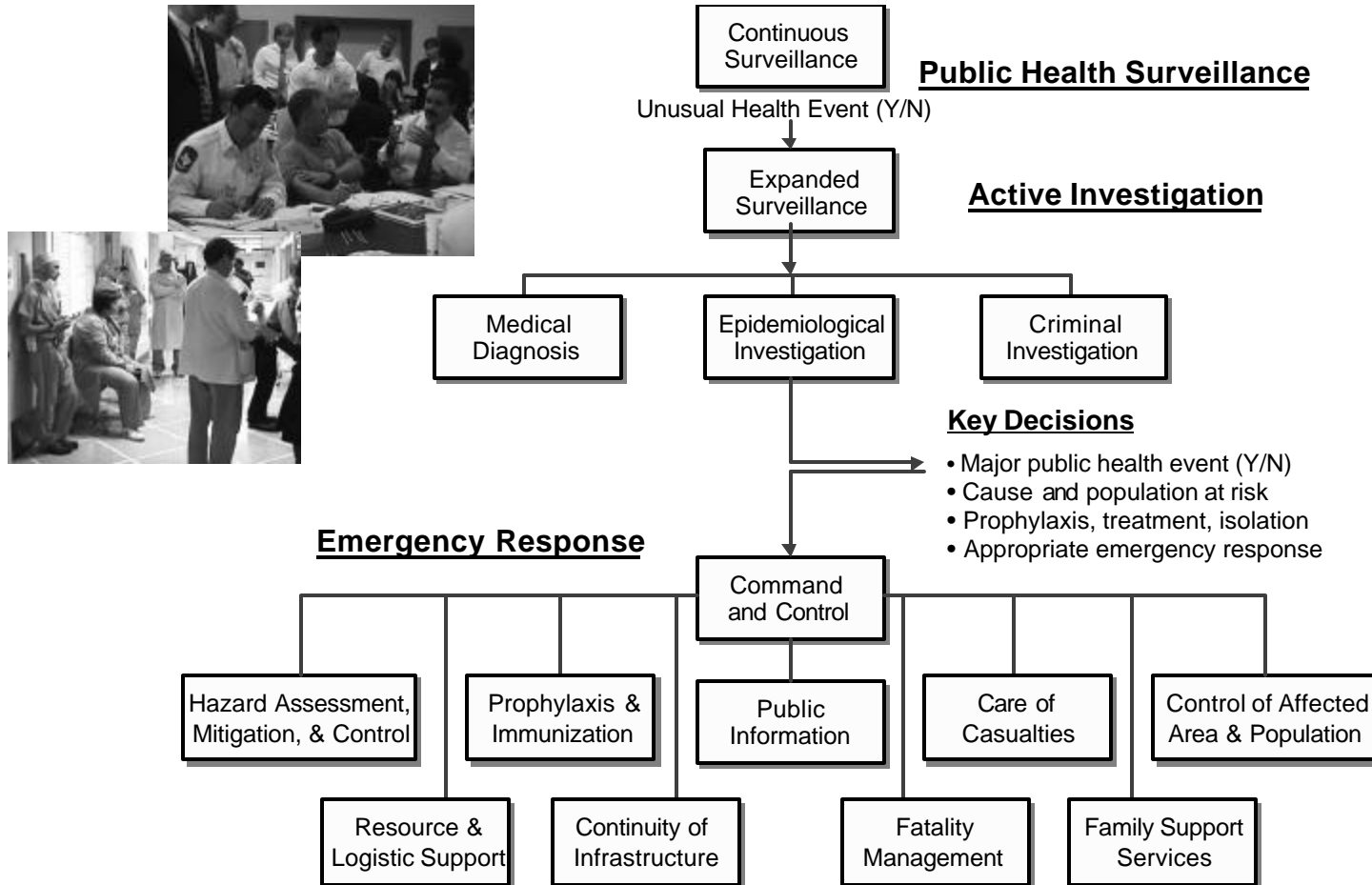
BIORESPONSE TEMPLATE

- **The Bioresponse Template is an integrated, full-spectrum response strategy designed to mitigate the consequences of a bioterrorist attack aimed at a civilian population**
- **The template can be used by any community or government as a starting point to formulate its own bioresponse plans**





BW IRP DECISION TREE





BW RESPONSE COMPONENTS & KEY DECISIONS

Continuous
Surveillance

Key Decision

Decide if an unusual public health event has occurred.

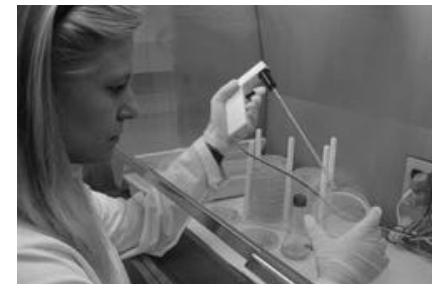
Initiate Active Investigation



SURVEILLANCE

Medical surveillance improves the chances of quickly detecting unusual medical events:

- **Medical staff should be trained to be alert to unusual clusters of disease symptoms indicative of bioterrorist activity**
- **Initiates the four *active investigation* components**





BW RESPONSE COMPONENTS & KEY DECISIONS

Active Investigation

Expanded
Surveillance

Decide if a major public
health event is occurring.

Medical
Diagnosis

Epidemiological
Investigation

Criminal
Investigation

Make Key Decisions

Results



MEDICAL DIAGNOSIS



- **Local officials should have established procedures for confirmation and definitive diagnosis of suspected BW agents**
- **Undertake clinical lab tests**
- **Obtain presumptive diagnosis and preliminary lab ID**
- **Ship samples to CDC/USAMRIID and to USDA**
- **Obtain confirmed diagnosis and agent ID**



EPIDEMIOLOGICAL INVESTIGATION

- **Integrate epi and criminal data gathering and sharing**
- **Conduct information and contact-tracing efforts**
- **Establish case definition and update with new findings**
- **Analyze distribution of cases, places, and time**
- **Define population at risk**
- **Recommend measures for containment, prevention, treatment, and protection**



CRIMINAL INVESTIGATION

- **Activate investigation task force**
- **Conduct interviews with hospital staff, patients, and others**
- **Establish tip-line**
- **Collect evidence, such as unexplained powder residue**
- **Interface with epi investigation and share information**



BW RESPONSE COMPONENTS & KEY DECISIONS

Results from the Active Investigation

Key Decisions

Decide on a potential cause and the population at risk.

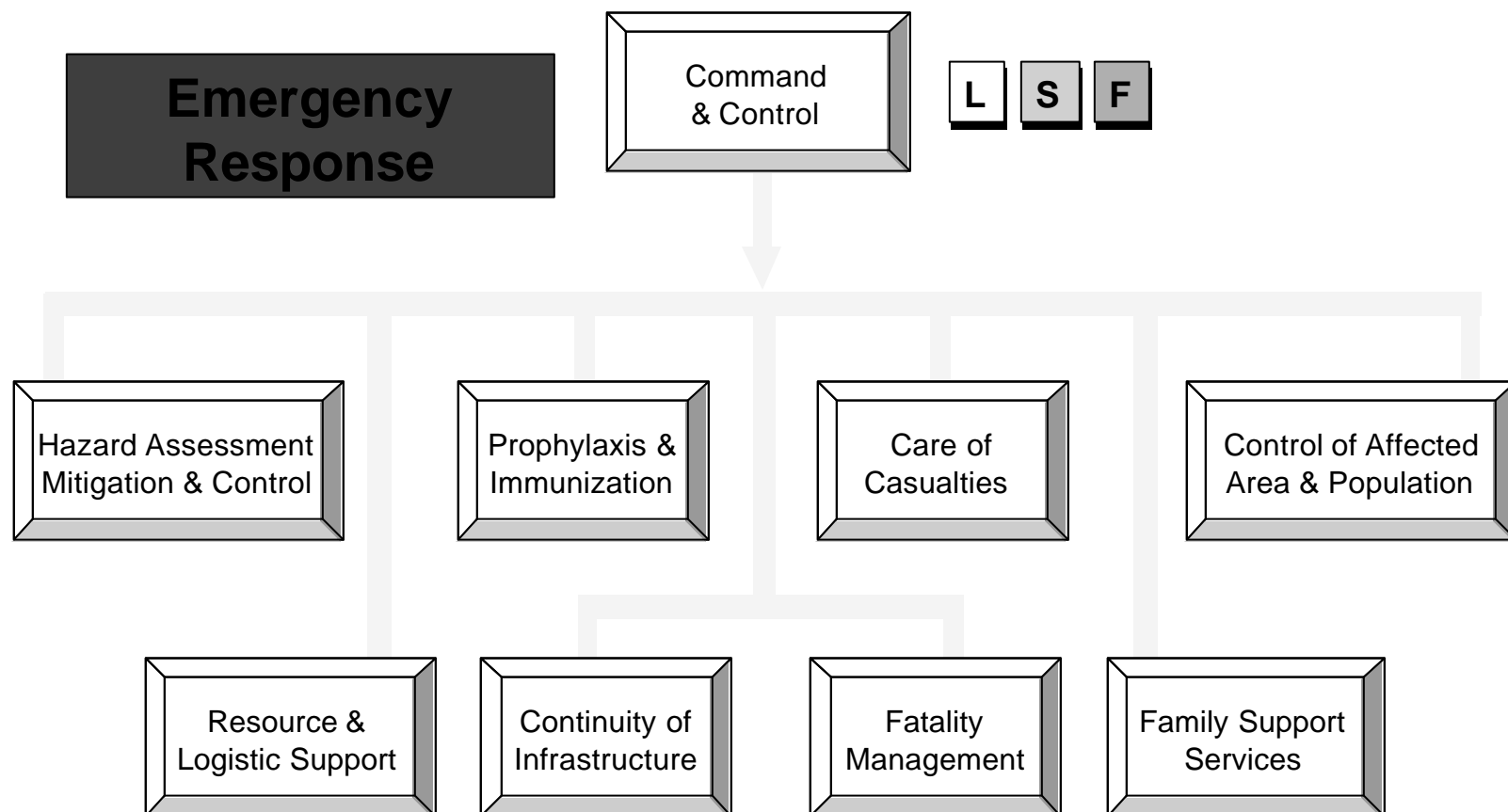
Decide on the appropriate medical prophylaxis, treatment, and isolation measures.

Decide on appropriate activation of response functions and strategies.

Activate Emergency Response



BW RESPONSE COMPONENTS & KEY DECISIONS





COMMAND AND CONTROL

- **Activate EOC**
- **Implement Emergency Operations Plans**
- **Deploy all relevant assets**
- **Provide representatives to JOC and ROC**
- **Declare emergency/disaster**





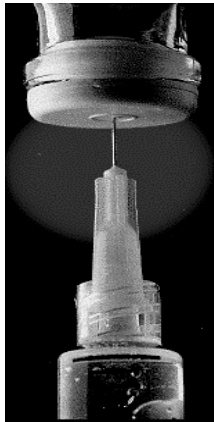
HAZARD ASSESSMENT, MITIGATION, & CONTROL

- **Conduct environmental sampling (air, water, soil, surfaces, animals, insects, plants, as applicable)**
- **Conduct control and decontamination measures**
- **Perform vector and animal control**
- **Control food sources**
- **Support sampling and decontamination teams**





PROPHYLAXIS & IMMUNIZATION



- **Mass prophylaxis involves the distribution and medical application of appropriate antibiotics, vaccines, or other medications in order to *prevent* disease and death in exposed victims**
- **The timeliness with which medical prophylaxis can be implemented effectively is critical to its success**



- **Local officials should address the issue of providing priority prophylaxis for use by “essential” emergency personnel**



CARE OF CASUALTIES



- **Provide care to initial patients in existing hospitals**
- **Activate Modular Emergency Medical System**
- **Establish medical command centers in community hospitals**
- **Provide medical regulation on “level of treatment”**
- **Establish casualty collection sites (e.g. NEHC, POD)**
- **Establish ancillary acute care facilities (e.g. ACC)**
- **Establish community outreach (particularly for contagious disease)**



CONTROL OF AFFECTED AREA & POPULATION



- **Physical control:**
 - Provide security at medical sites and vital installations
 - Limit gatherings
 - Provide ingress/egress routes for responders
- **Public information control:**
 - Operate local incident help-line
 - Post incident and self-help information
 - Conduct senior officials' press conferences





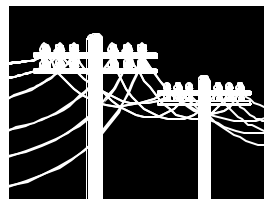
RESOURCE & LOGISTICS SUPPORT

- **Establish mobilization centers and distribution points**
- **Establish centralized reception center for support personnel**
- **Provide housing and feeding to emergency responders and home-bound victims**
- **Coordinate transportation and delivery of supplies**



CONTINUITY OF INFRASTRUCTURE

- **Activate continuity of operations and staffing plans**
- **Close business offices to minimize contact with public**
- **Activate alternate operating facilities**
- **Identify essential personnel and request priority treatment and protective measures**
- **Activate mutual aid among industry**





FATALITY MANAGEMENT

- **Fatality management:**
 - **Rapid central processing of remains**
 - **Long-term storage facilities**
 - **Determination of final disposition**
- **Activation of a planned, centralized command system must occur to manage the response**





FAMILY SUPPORT SERVICES

- **Provide non-medical victim assistance**
- **Conduct notification of next-of-kin**
- **Provide crisis counseling**
- **Implement state and federal assistance programs**
- **Implement central coordination of volunteer service organizations**





CONCLUSIONS

Timing of response is the key:

- **Surveillance to detect attack**
- **Make response decisions quickly**
- **Implement pre-existing response plans**
- **Distribute prophylaxis (if applicable) quickly**
- **Keep up with flow of sick and worried well**
- **Establish system to receive and rapidly utilize outside help**

Early and continuous coordination among the law enforcement, medical, emergency management, and public health communities is fundamental



CONCLUSIONS (Cont.)

- **A BW terrorist event would primarily represent a public health *catastrophic medical emergency***
- **The most crucial aspect of an effective total response system will be the medical response - need medical community buy-in and participation**



CONCLUSIONS (Cont.)

Timely and effective medical response to a large number of BW casualties would require the rapid establishment of the Modular Emergency Medical System (MEMS):

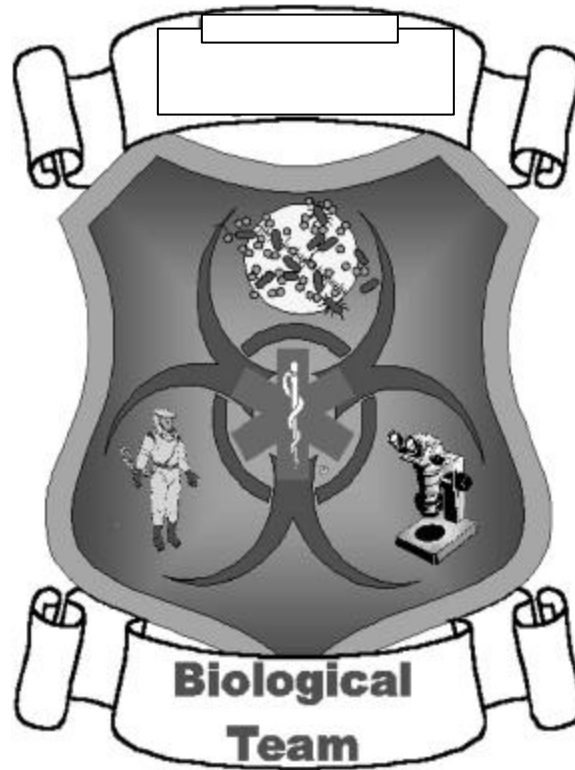
- **Neighborhood Emergency Help Centers (NEHC) to receive casualties and worried well, provide triage, and dispense pharmaceuticals and instructions**
- **Acute Care Centers (ACC) to provide definitive and supportive care to the critically ill**
- **Sector outreach to provide instructions, pharmaceuticals, and mobilization of citizen self-help for the critically ill that stay at home**

Pamphlets forthcoming for MEMS, NEHC, and ACC



CONCLUSIONS (Cont.)

- **BW response must be led by local community**
- **City officials will need to make difficult decisions on a presumptive basis**
- **Need regional, state, and federal assets for BW incident**
- **Need to consider long-term effects, distributed attacks, and agricultural targets**



Dr. Mohamed Mughal
410-436-4921

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